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REPORT ON THE MOLLUSCA CHIEFLY
CLLECTED BY THE S. S. SOYO-MARU OF
THE IMPERIAL FISHERIES EXPERIMENTAL
STATION ON THE CONTINENTAL SHELF
BORDERING JAPAN DURING THE YEARS
1922-1930 -PART 4. LAMELLIBRANCHIA (2)-

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RIGHT:

REPORT ON THE MOLLUSCA CHIEFLY COLLECTED BY THE
S. S. SÔYÔ-MARU OF THE IMPERIAL FISHERIES
EXPERIMENTAL STATION ON THE CONTINENTAL SHELF
BORDERING JAPAN DURING THE YEARS 1922-1930

PART 4. LAMELLIBRANCHIA (2)¹⁾²⁾

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With Plates I-II

This is a second report of the Lamellibranchiate molluscs collected from the continental shelf bordering Japan mainly by the S. S. Sôyô-maru, in which 122 species of the Teleodesmid molluscs are listed, including two new genera and sixteen new species as follow :

- | | |
|--|---|
| <i>Venericardia (Megacardita) soyoae</i> sp. nov. | <i>Lucinoma yoshidai</i> sp. nov. |
| <i>Lucinoma adamsiana</i> sp. nov. | <i>Lucinoma japonica</i> sp. nov. |
| <i>Soyokellia compressa</i> gen. et sp. nov. | <i>Chama argentata</i> KURODA et HABE
sp. nov. |
| <i>Pitar (Agriopoma) noguchii</i> sp. nov. | <i>Gari hosoyai</i> sp. nov. |
| <i>Abra soyoae</i> sp. nov. | <i>Abra fujitai</i> sp. nov. |
| <i>Abrina kinoshitai</i> KURODA et HABE sp. nov. | <i>Fabulina soyoae</i> sp. nov. |
| <i>Moerella nishimurai</i> KURODA et HABE sp. nov. | <i>Fabulina abyssicola</i> sp. nov. |
| <i>Bathytellina citrocarnea</i> KURODA et HABE
gen. et sp. nov. | <i>Mactra iridescens</i> KURODA et HABE
sp. nov. |

My hearty thanks are due to Dr. Tokubei KURODA for his kind direction in the course of this study.

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- 1) Contributions from the Seto Marine Biological Laboratory, No. 317.
 - 2) Contributions from the Amakusa Marine Biological Laboratory (Kyushu University), No. 120.

Subclass TELEODESMACEA

Order HETERODONTA

Superfamily Astartacea

Family Astartidae

131. *Astarte hakodatensis* YOKOYAMA

(Pl. I, figs. 17, 18)

1920 *Astarte hakodatensis* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 39 (6), p. 140, pl. 11, figs. 5, 6.

Localities: St. 452 (off Gotô Islands, 154 m); St. 475 (off Tsushima, 192 m); St. 491 (off Shimane Pref., 112 m) and St. 652 (Tsugaru Strait, 110 m).

Distribution: Japan Sea and off Gotô Islands.

132. *Astarte (Tridonta) borealis* (SCHUMACHER)

1817 *Tridonta borealis* SCHUMACHER, Essai Nouv. Syst. Vers. Test., p. 146, pl. 17, fig. 1.

1849 *Astarte corrugata* MIDDENDORFF, Mem. Acad. Sci. Imp. St. Petersburg, (6) 6, p. 562, pl. 17, figs. 4-10.

Localities: Sts. 47 and 152 (off Iwate Pref., 355 m and 377 m); St. 73 (off Shimokita Peninsula, 390 m); St. 481 (off Tsushima, 143 m); Sts. 495 and 498 (off Shimane Pref., 146 m and 139 m) and St. 541 (off Yosa Peninsula, 150 m).

Distribution: Northern Pacific; Hokkaido and Honshu (south to off Tsushima on the Japan Sea coast and off Bôso Peninsula on the Pacific coast.).

133. *Astarte (Tridonta) bennettii* DALL

1903 *Astarte bennettii* DALL, Proc. U. S. Nat. Mus., 26, p. 946, pl. 63, fig. 6.

1935 *Astarte aomoriensis* NOMURA et HATAI, Satio Hô-on Kai Mus. Res. Bull. 6, p. 115, pl. 9, fig. 5.

Localities: St. 65 (off Iwate Pref., 216 m); St. 78 (off Shimokita Peninsula, 143 m); Sts. 439 and 461 (off Gotô Islands, 155 m and 187 m); St. 475 (off Tsushima, 192 m); St. 475 and 479 (off Urusan, Korea, 148 m and 143 m) and Sts. 491 and 495 (off Shimane Pref., 112 m and 146 m).

Distribution: Bering Sea; Hokkaido; northern Honshu and Japan Sea (south to Gotô Islands).

134. *Astarte (Tridonta) alaskensis* DALL

1903 *Astarte alaskensis* DALL, Proc. U. S. Nat. Mus., 26, p. 944, pl. 63, fig. 2.

Localities: St. 71 (off Shimokita Peninsula, 444 m) and St. 511 (off Oki Islands, 267 m).

Distribution: Bering Sea to northern Honshu and Japan Sea.

135. *Astarte (Tridonta) multicostata* FILATOVA

(Pl. II, fig. 19)

1957 *Astarte multicostata* FILATOVA, Bull. Inst. Oceanology, 23, p. 297, fig. 1.

Locality: St. 541 (off Yosa Peninsula, Kyoto Pref., 150 m).

Distribution: Bering Sea; Kuriles; Hokkaido and Japan Sea.

Remarks: This species was erroneously reported as *Astarte (Tridonta) vernicosa* DALL by the writer in 1952.

Family Crassatellitidae

136. *Crassatellites nanus* (A. ADAMS et REEVE)

(Pl. I, fig. 28)

1850 *Crassatella nana* A. ADAMS et REEVE, Voy. Samarang, Moll., p. 81, pl. 23, fig. 2.

1882 *Crassatella japonica* DUNKER, Index Moll. Mar. Jap., p. 220.

Localities: St. 251 (Sagami Bay, 165 m); St. 429 (off Amakusa, 223 m); St. 447 (off Gotô Islands, 90 m); Sts. 468 and 475 (off Tsushima, 112 m and 192 m); St. 481 off Urusan, Korea, 143 m); Sts. 492 and 494 (off Shimane Pref., 132 m and 110 m) and St. 521 (off Oki Islands, 86 m).

Distribution: China; Kyushu; Shikoku; Honshu and Korea.

137. *Crassatellites heteroglyptus* PILSBRY

1889 *Crassatella japonica* SOWERBY, Jour. Linn. Soc. London. Zool., 20, p. 399, pl. 25, ag. 19
(non DUNKER 1882).

1895 *Crassatellites heteroglypta* PILSBRY, Cat. Mar. Moll. Japan, p. 135.

Locality: St. 4 (off Bôso Peninsula, 287 m).

Distribution: Kyushu; Shikoku and Honshu.

138. *Crassatellites adamsi* (KOBELT)

1850 *Crassatella compressa* A. ADAMS et REEVE, Voy. Samarang, Moll., p. 82, pl. 23, fig. 10,
(non LAMARCK 1808).

1886 *Crassatella adamsi* KOBELT, Conchyl. Cab., 10 (1a), p. 26, pl. 7, fig. 13.

Localities: St. 481 (off Tsushima, 143 m) and Sts. 497 and 498 (off Shimane Pref., 143 m and 139 m).

Distribution: Japan Sea.

139. *Crassatina oblongata* (YOKOYAMA)

(Pl. I, figs. 1, 2)

1920 *Crassatella oblongata* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 39 (6), p. 143, pl. 11, figs. 8, 9.

Localities: St. 205 (Kumano-nada, 224 m); St. 220 (Tosa Bay, 234 m); Sts. 249 and 255 (Sagami Bay, 229 m and 263 m); St. 257 (off Izu Peninsula, 137 m); Sts. 259, 276, 279 and 286 (Suruga Bay, 188 m, 77 m, 155 m and 123 m); St. 295 (off Tanegashima, 154 m); Sts. 325 and 327 (Bungo Channel, 210 m and 216 m); St. 331 (off Ashizuri-zaki, 344 m); St. 345 (off Muroto-zaki, 165–199 m); St. 349 (Kii Channel, 152 m); St. 352 (off Tanabe, Wakayama Pref., 154 m); St. 379 (Enshu-nada, 391 m); St. 432 (off Gotô Islands, 148 m) and St. 498 (off Shimane Pref., 139 m)

Distribution: Kyushu; Shikoku and Honshu (north to Bôsô Peninsula and Shimane Peninsula).

Superfamily Carditacea

Family Carditidae

140. *Cardita leana* DUNKER

1860 *Cardita leana* DUNKER, Mal. Blatt., 6, p. 233.

1860 *Cardita cumingiana* DUNKER, Mal. Blatt., 6, p. 223.

Locality: St. 4 (off Bôsô Peninsula, 287 m).

Distribution: Formosa to Honshu and Korea.

141. *Cardita nodulosa* LAMARCK

(Pl. I, fig. 9)

1819 *Cardita nodulosa* LAMARCK, Anim. s. Vert. 6 (1), p. 25.

1843 *Cardita rufescens* REEVE, Conch. Icon., sp. 19.

Localities: St. 78 (off Shiriya-zaki, Shimokita Peninsula, 143 m); St. 211 (Enshû-nada, 190 m); St. 240 (Sagami Bay, 192 m); St. 296 (off Tanegashima, 219 m); Sts. 319 and 321 (off Miyazaki Pref., 210 m and 457 m); St. 330 (off Ashizuri-zaki, Kochi Pref., 102 m); St. 345 (off Muroto-zaki, Kochi Pref., 165–199 m); Sts. 459, 466 and 468 (off Tsushima, 115 m, 110 m and 112 m); Sts. 491 and 498 (off Shimane Pref., 112 m and 139 m); Sts. 503, 504, 506 and 512 (off Oki Islands, 146 m, 106 m, 176 m and 141 m); St. 554 (off Ishikawa Pref., 95 m); St. 575 (off Noto Peninsula, 123 m); St. 591 (off Niigata Pref., 311 m); St. 620 (off Akita Pref., 139 m); and St. 646 (off Tsugaru Peninsula, 123 m).

Distribution: Kyushu; Shikoku and Honshu.

142. *Glans hirasei* (DALL)

(Pl. I, fig. 15, 16)

1918 *Venericardia hirasei* DALL, Proc. U. S. Nat. Mus., 54, p. 234.

Localities: St. 220 (Tosa Bay, 234 m); St. 431 (2ff Amakusa, 152 m); Sts. 441 and 442 (off Gotô Islands, 353 m and 340 m) and Sts. 466 and 469 (off Tsushima, 110 m and 91 m).

Distribution: Kyushu; Shikoku and Honshu (north to Sagami Bay).

143. *Venericardita* (*Megacardita*) *soyoeae* sp. nov.

Shell rather subquadrate in shape, moderately inflated, anterodorsal margin which is abruptly sloping is shorter than the straight postero-dorsal and rounded anteriorly and truncated posteriorly; ventral margin nearly straight and subparallel with the postero-dorsal margin; beak small, but prominent anteriorly, situated at the anterior third; surface ornamented with about 16-18 radiating ribs which are granulated by the intersection of coarse growth lines, but more or less scaly on the ribs of the postero-dorsal area; interspaces are narrow and deep; lunule small but distinctly impressed; the hinge armature is of the *megacardita*-type.

Length 12 mm; height 9.8 mm and breadth 3.8 mm (right valve) (type specimen)

Length 10.5 mm; height 8.9 mm and breadth 3.2 mm (left valve)

Length 10.0 mm; height 8.3 mm and breadth 3.0 mm (left valve)

Type locality: St. 494 (off Shimane Pref.).

Localities: St. 205 (Kumano-nada, 224 m); St. 222 (Tosa Bay, 210 m); Sts. 240, 251 and 255 (Sagami Bay, 192 m, 165 m and 263 m); St. 259 (Suruga Bay, 188 m); Sts. 439, 447 and 452 (off Gotô Islands, 155 m, 90 m and 154 m); Sts. 459 and 468 (off Tsushima, 115 m and 112 m); Sts. 481 and 484 (off Yamaguchi Pref., 143 m and 93 m); Sts. 491 and 494 (off Shimane Pref., 112 m and 110 m); St. 568 (off Noto Peninsula, 90 m) and St. 580 (Toyama Bay, 135 m).

Distribution: Kyushu; Shikoku and Honshu (north to Sagami Bay and Toyama Bay).

Remarks: This is somewhat close to the young form of *V. (M.) coreensis* (Deshayes), but has the scaly radial ribs on the postero-dorsal area.

144. *Venericardia* (*Megacardita*) *ferruginosa* (A. ADAMS et REEVE)

(Pl. I, fig. 22)

1850 *Cardita ferruginosa* A. ADAMS et REEVE, Voy. Samarang, Moll., p. 76, pl. 21, fig. 21.

1913 *Venericardia kiiensis* SOWERBY, Ann. Mag. Nat. Hist., (8) 12, p. 238, pl. 3 fig. 14.

1920 *Venericardia cipangoana* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 39 (6), p. 137, pl. 11, fig. 2.

Localities: St. 4 (off Bôso Peninsula, 287 m); St. 211 (off Tanabe, Wakayama

Pref., 190 m); St. 220 (Tosa Bay, 234 m) and St. 440 (off Gotô Islands, 152 m).

Distribution: Kyushu: Shikoku and Honshu (north to Bôsô Peninsula) and southern Korea.

145. *Cyclocardia ferruginea* (CLESSIN)

1888 *Cardita ferruginea* CLESSIN, Conchyl. Cab., 10 (1), p. 17, pl. 6, fig. 11.

Localities: Sts. 47, 53, 89, and 90 (off Iwate Pref., 355 m, 190 m, 124 m and 152 m); Sts. 78, 81 and 84 (off Shimokita Peninsula, 143 m 172 m and 171 m); St. 321 (Bungo Channel, 457 m); St. 429 (off Amakusa, 223); Sts. 439 and 452 (off Gotô Islands, 155 m and 154 m); Sts. 459, 462, 475 and 477 (off Tsushima, 115 m, 117 m, 192 m and 99 m); St. 478 (off Pusan, Korea, 101 m); Sts. 479 and 481 (off Urusan, Korea, 148 and 143 m); Sts. 495 and 498 (off Shimane Pref., 146 m and 139 m); St. 506 (off Oki Islands, 176 m) and Sts. 647 and 652 (off Tsugaru Peninsula, 86 m and 110 m).

Distribution: North-western Kyushu and Honshu (south to Sagami Bay) and Japan Sea.

Superfamily Glossacea

Family Vesicomysidae

145. *Vesicomys katsuae* KURODA

1952 *Vesicomys katsuae* KURODA, Jap. Jour. Malac. (Venus), 17, p. 4, figs. 5-9.

Localities: St. 216 (off Kanno-ura, Kochi Pref., 274 m) and St. 302 (off Toizaki, Miyazaki Pref., 572 m).

Distribution: Shikoku and southern Kyushu.

Family Glossidae

146. *Meiocardia tetragona* (A. ADAMS et REEVE)

(Pl. I, fig. 5, 6)

1850 *Isocardia tetragona* A. ADAMS et REEVE, Voy. Samarang, Moll., p. 76, pl. 22, fig. 1.

Localities: St. 12 (off Chôshi, Chiba Pref., 325 m); Sts. 188, 259, 276 and 286 (Suruga Bay, 214 m, 188 m, 77 m, and 123); St. 300 and 301 (off Toizaki, Miyazaki Pref., 110 m and 181 m); Sts. 325 and 327 (off Uwajima, Ehime Pref., 210 m and 216 m); St. 340 (Tosa Bay, 481 m); St. 345 (off Muroto-zaki, Kôchi Pref., 165-199 m); St. 347 (off Kanno-ura, Kôchi Pref., 126 m); St. 376 (Enshû-nada, 64 m); St. 384 (the entrance of Ise Bay, 21-38 m); St. 417 (off Makura-zaki, Kagoshima, Pref., 192 m); St. 428 (off Amakusa, 119 m); Sts. 431, 432, 437, 439, 441, 445, 448,

451 (off Gotô Islands, 152 m, 148 m, 307 m, 155 m, 353 m, 73 m, 157 m, and 187 m); St. 455 (off Quelpart Island, 90 m); St. 466 (off Iki Island, 110 m); Sts. 468 and 469 (off Tsushima, 112 m and 91 m); Sts. 483 and 492 (off Yamaguchi Pref., 130 m and 132 m); St. 494 (off Shimane Pref., 110 m); Sts. 503 and 504 (off Oki Island, 146 m and 106 m); and St. 591 (off Niigata Pref., 311 m).

Distribution: East Indies; Kyushu; Shikoku and Honshu (north to Chôshi, Chiba Pref., and Niigata Pref.).

147. *Meiocardia moltkiana* (SPENGLER)

1783 *Isocardia moltokiana* SPENGLER, Schr. Berlin Ges. Naturf., 4, p. 321, pl. 14, figs. 1-4.

1882 *Isocardia sanguinomaculata* DUNKER, Index Moll. Mar. Jap., p. 213.

Localities: St. 211 (off Tanabe, Wakayama Pref., 190 m); Sts. 444 and 445 (off Gotô Islands, 194 m and 73 m).

Distribution: East Indies; Philippines; China; Kyushu; Shikoku and Honshu (north to Sagami Bay).

Superfamily Lucinacea

Family Ungulinidae

148. *Joannisiella cumingii* (HANLEY)

1842 *Cyrenoidea cumingii* HANLEY, Cat. Rec. Biv. Shells, p. 353, pl. 15, fig. 5.

Localities: St. 479 (off Urusan, Korea, 148 m) and St. 646 (off Tsugaru Peninsula, 123 m).

Distribution: Formosa to Honshu.

149. *Joannisiella lunaris* (YOKOYAMA)

1927 *Diplodonta lunaris* YOKOYAMA, Jour. Fac. Sci. Imp. Univ. Tokyo, (2) 1 (10), p. 433, pl. 50, figs. 5, 6.

Localities: St. 4 (off Bôso Peninsula, 287 m); St. 483 and 488 (off Yamaguchi Pref., 130 m and 480 m).

Distribution: Kyushu, Shikoku and Honshu.

Remarks: This species is very common in bays of Japan.

150. *Diplodonta gouldi* YOKOYAMA

1920 *Diplodonta gouldi* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 39 (6), p. 132, pl. 10, fig. 5.

Localities: St. 12 (off Chôshi, Chiba Pref., 325 m); St. 255 (Sagami Bay, 263 m);

St. 324 (off Uwajima, Ehime Pref., 106 m); and St. 600 (off Sado Island, 168 m).

151. *Felaniella usta* (GOULD)

1861 *Mysia (Felania) usta* GOULD, Proc. Boston Soc. Nat. Hist., 8, p. 32.

1929 *Felaniella olivacea* BARTSCH, Inst. Hydrol. Explor. Meers U. S. S. R., p. 132, 10, pl. 1, figs. 8-14.

Locality: St. 622 (off Akita Pref., 218 m) *vide* NOMURA et HATAI, 1935.

Distribution: Northern Honshu; Hokkaido; Saghalien; Korea and Siberia.

Family Thyasiridae

152. *Conchocele disjuncta* GABB

(Pl. II, fig. 5)

1866 *Conchocele disjuncta* GABB, Geol. Surv. Calif. Palaeo., 2, p. 99, pl. 7, figs. 48 a, b.

1925 *Thyasira bisecta nipponica* YABE et HATAI (in part), Sci. Rep. Tohoku Imp. Univ., (2) 7 (4), p. 84, pl. 23, figs. 2, 8, 10.

Localities: St. 500 (off Shimane Pref., 642 m) and St. 514 (off Oki Island, 455 m).

Distribution: Alaska; Hokkaido and Japan Sea.

153. *Thyasira tokunagai* KURODA et HABE

1951 *Thyasira tokunagai* KURODA et HABE, Gen. Jap. Shells, 2, p. 127, fig. 266.

Localities: St. 259 (Suruga Bay, 188 m); St. 437 (off Gotô Islands, 307 m); St. 459 (off Tsushima, 115 m); Sts. 492 and 495 (off Shimane Pref., 132 m and 146 m) and St. 580 (Toyama Bay, 135 m).

Distribution: North-western Kyushu, Honshu and Hokkaido.

154. *Thyasira (Philis) kanamarui* HABE

(Pl. I, figs. 23, 24)

1951 *Thyasira (Philis) kanamarui* HABE, Gen. Jap. Shells, 2, p. 126, figs. 263-265.

Locality: St. 371 (off Atsumi Peninsula, 84 m).

Distribution: Honshu (Mie Pref. and Aichi Pref.).

Remarks: This species is also found in the Pleistocene deposit of Moeshima in Kagoshima Bay.

155. *Thyasira (Parathyasira) kawamurai* HABE

(Pl. I, fig. 27)

1951 *Thyasira (Parathyasira) kawamurai* HABE, Gen. Jap. Shells, 2, p. 127, figs. 262.

Locality: St. 259 (Suruga Bay, 188 m).

Distribution: Honshu (Suruga Bay and Sagami Bay).

Remarks: This species is also found in the Pleistocene deposit of Moeshima in Kagoshima Bay.

156. *Axinopsida subquarata* (A. ADAMS)

(Pl. II, fig. 4)

1862 *Cryptodon* (*Clausina*) *subquadrata* A. ADAMS, Ann. Mag. Nat. Hist., (5) 9 (51), p. 227.

Localities: St. 479 (off Urusan, Korea, 148 m) and St. 483 (off Yamaguchi Pref., 130 m).

Distribution: Japan Sea; Hokkaido and northern Honshu.

Family Lucinidae

157. *Lucinoma annulata* (REEVE)

1850 *Lucina annulata* REEVE, Conch. Icon., sp. 17.

Localities: St. 11 (off Chôshi, Chiba Pref., 375 m); Sts. 249 and 255 (Sagami Bay, 249 m and 263 m); St. 205 (Kumano-nada, 224 m); Sts. 433, 437, 447 and 464 (off Gotô Islands, 168 m, 307 m, 90 m and 146 m); Sts. 471, 473 and 483 (off Yamaguchi Pref., 90 m, 143 m and 130 m); Sts. 474 (off Tsushima, 219 m); St. 478 (off Fusan, Korea, 101 m); St. 492 (off Shimane Pref., 132 m); St. 541 (off Yosa Peninsula, Kyoto Pref., 150 m) and St. 591 (off Niigata Pref., 311 m).

Distribution: Kyushu to Hokkaido; Alaska.

158. *Lucinoma yoshidai* sp. nov.

Shell white with the pale yellowish periostracum, rather flat, subquadrate in shape, rounded anteriorly and truncated posteriorly; beak small, oblique anteriorly, antero-dorsal margin recurved in front of the beak the postero-dorsal nearly straight; surface ornamented with the distantly placed and sharply lamellate riblets which are continuous over the whole surface; between the two riblets several weak growth lines are observed; a very weak flexure indicated on the postero-dorsal area; lunule elongated oval in shape, bordered by the sharp edges.

Length 24.2 mm; height 22.9 mm and breadth 4.6 mm (right valve) (type specimen)

Length 26.0 mm; height 25.2 mm and breadth 5.1 mm (right valve) (paratype specimen no. 1)

Length 25.0 mm; height 23.0 mm and breadth 5.4 mm (left valve) (paratype specimen no. 2)

Length 25.4 mm; height 22.5 mm and breadth 5.1 mm (left valve) (paratype specimen no. 3)

Type locality: St. 495 (off Shimane Pref.).

Localities: St. 475 (off Tsushima, 192 m); St. 479 (off Utsunomiya, Korea, 148 m); Sts. 495 and 498 (off Shimane Pref., 146 m and 139 m).

Distribution: Southern part of Japan Sea.

Remarks: This new species is easily distinguished from *L. annulata* (REEVE) in having the very flat subquadrate shell on which the distantly placed lamellate lines are marked. The writer takes pleasure in naming this new species in honour of Dr. Hiroshi YOSHIDA who was a member of scientific staffs during this survey.

159. *Lucinoma adamsiana* sp. nov.

This new species is very similar to *Lucinoma yoshidai*, but in the former the shell is subquadrate in shape, truncated at the anterior and posterior ends, the surface of which marks the densely set concentric riblets all over and a distinct flexure on the postero-dorsal area. *L. annulata* is another allied species to this new species, but may be easily distinguished in the circular shell without a distinct flexure.

Length 15.5 mm; height 14.4 mm and 3.6 mm (left valve) (type specimen).

Type locality: St. 484 (off Yamaguchi Pref. 93 m).

160. *Lucinoma japonica* sp. nov.

Shell white orbicular, very inflated; beak small, oblique anteriorly; surface with concentric lamellae throughout; lunule narrow but distinctly excavated; two cardinal teeth in each valve; in the right valve the anterior cardinal teeth confuses with the dilation of anterior dorsal margin and the posterior one is small and in the left valve the anterior cardinal tooth is small and the posterior one is elongate posteriorly; the anterior muscle scar is long as in other lucinid species.

Length 13.9 mm; height 13.0 mm and breadth 7.0 mm (type specimen)

Length 13.9 mm; height 13.4 mm and breadth 3.7 mm (left valve) (paratype specimen)

Type locality: St. 481 (off Yamaguchi Pref.).

Localities: St. 481 (off Yamaguchi Pref., 143 m) and St. 492 (off Shimane Pref., 132 m).

This new species is easily separable from other species of the genus *Lucinoma* in having the circular inflated shell.

161. *Notomyrtea soyoae* HABE

(Pl. II, fig. 10)

1953 *Notomyrtea soyoae* HABE, Jap. Jour. Malac. (Venus), 17, p. 131, figs. 8, 9.

Localities: St. 248 (Sagami Bay, 170 m); St. 433 (off Gotô Islands, 168 m); Sts.

481 and 486 (off Yamaguchi Pref., 143 m and 139 m); and Sts. 492, 495 and 498 (off Shimane Pref., 132 m, 146 m, and 139 m).

Distribution: North-western Kyushu and the southern part of Japan Sea and Sagami Bay.

162. *Alucinoma soyoae* HABE

(Pl. II, figs. 16, 17)

1958 *Alucinoma soyoae* HABE, Jap. Jour. Malac., 19, p. 178, 181, figs. 5, 6.

Locality: St. 498 (off Shimane Pref., 139 m).

Distribution: Off Shimane Pref. and Tosa Bay.

163. *Sydrolina yamakawai* (YOKOYAMA)

1920 *Lucina yamakawai* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 39 (6), p. 135, pl. 10, fig. 9.

Locality: St. 365 (off Hamashima, Mie Pref., 93 m).

Distribution: Kyushu; Shikoku and Honshu (north to Bôso Peninsula).

164. *Wallucina lamyi* (CHAVAN)

1938 *Loripes* (*Wallucina*) *lamyi* CHAVAN, Jour. de Conchyl., 82, p. 227.

1882 *Lucina contraria* DUNKER, Index Moll. Mar. Jap., p. 215, pl. 13, figs. 12-14 (*non* DUNKER, 1846).

Localities: St. 4 (off Bôso Peninsula, 287 m); Sts. 483 and 484 (off Yamaguchi Pref., 130 m and 93 m); and Sts. 492 and 494 (off Shimane Pref., 132 m and 110 m).

Distribution: Kyushu; Shikoku and Honshu.

165. *Bellucina civica* (YOKOYAMA)

(Pl. II, fig. 3)

1927 *Cardium civicum* YOKOYAMA, Jour. Fac. Sci. Imp. Univ. Tokyo, (2) 2 (4), p. 179, pl. 48, figs. 3, 4.

Localities: St. 12 (off Chôshi, Chiba Pref., 325 m); St. 259 (Suruga Bay, 188 m); St. 365 (off Hamashima, Mie Pref., 93 m); Sts. 371 and 376 (Enshû-nada, 84 m and 64 m); Sts. 432, 433 and 452 (off Gotô Islands, 148 m, 168 and 154 m); Sts. 459, 466 and 468 (off Tsushima, 115 m, 110 m and 112 m); Sts. 482, 483 and 488 (off Yamaguchi Pref., 139 m, 130 m and 406 m); St. 493 (off Shimane Pref., 124 m) and St. 504 (off Oki Islands, 106 m).

Distribution: Kyushu; Shikoku and Honshu (north to Chôshi, Chiba Pref. and off Oki Islands).

166. *Ctena delicatula* (PILSBRY)

1904 *Codakia bella delicatula* PILSBRY, Proc. Acad. Nat. Sci. Phila., 56, p. 555, pl. 41, figs. 15, 16.

Locality: St. 327 (off Uwajima, Ehime Pref., 216 m)

Distribution: Ryukyu; Kyushu; Shikoku and Honshu (north to Sagami Bay).

167. *Divalucina soyoae* (HABE)

(Pl. II, fig. 2)

1952 *Divaricella soyoae* HABE, Illust. Cat. Jap. Shells, 1 (22), p. 160.

Locality: St. 444 (off Gotô Islands, 194 m).

Distribution: Kyushu and Shikoku.

Superfamily Erycinacea

Family Erycinidae

168. *Soyokellia compressa* gen. et sp. nov.

Shell small, white, thin, oblong transversely, very compressed, very inequilateral, rounded at both ends; dorsal and ventral margins subparallel, surface marked only growth lines, beak small and a little pointed; anterior end shorter than the posterior; right valve with one anterior and two posterior teeth with a narrow resilifer between.

Length 5.5 mm, height 3.3 mm and 1.0 mm (right valve) (type specimen)

Type locality: St. 494 (off Shimane Pref., 110 m).

Remarks: The shell of this new species is characterized by the oblong shell which is strongly elongate anteriorly. The hinge teeth consists of three teeth as in the genus *Kellia*. The anterior teeth are long and lamellate and the middle one is solid and trigonal and the posterior one is narrow but not prominent. The resilifer between the posterior and middle teeth is rather narrow. By these features a new generic name is proposed to this new species. "*Mysella*" *oblongata* YOKOYAMA is very close to this new species in the shell appearance, but has different hinge teeth.

Superfamily Chamacea

Family Chamidae

169. *Chama dunkeri* LISCHKE

1870 *Chama dunkeri* LISCHKE, Mal. Bl., 17, p. 27.

Locality: St. 445 (off Gotô Islands, 73 m).

Distribution: Ryukyu; Kyushu, Shikoku and Honshu (north to Bôso Peninsula).

170. *Chama reflexa* REEVE

1846 *Chama reflexa* REEVE, Conch. Icon., sp. 16.

Localities: St. 11, (off Chôshi, Chiba Pref., 375 m); St. 292 (off Ôsumi Peninsula, 126 m); St. 327 (off Uwajima, Ehime Pref., 216 m); St. 345 (off Muroto-zaki, 166-199 m) and St. 444 (off Gotô Islands, 194 m).

Distribution: Formosa; Ryukyu; Kyushu; Shikoku and Honshu.

171. *Chama semipurpurata* LISCHKE

1870 *Chama semipurpurata* LISCHKE, Mal. Blatt., 17, p. 27.

Locality: St. 4 (off Bôsô Peninsula, 287 m).

Distribution: Ryukyu; Kyushu; Shikoku and Honshu (north to Bôsô Peninsula).

172. *Chama argentata* KURODA et HABE sp. nov.

Shell small but solid, white to orange, pearly; the free valve orbicular in shape and lamellose; the beak turns to whether right or left; the sessile valve deep and strongly and sharply lamellate and twisted right or left.

Length 12.5 mm; height 11.8 mm and breadth 3.3 mm (left valve of type specimen)

Length 12.5 mm; height 12.9 mm and breadth 5.7 mm (right valve of type specimen)

Type locality: Tosa Bay, Shikoku (collected by Mr. A. TERAMACHI).

Localities: St. 218 (off Muroto-zaki, Kôchi Pref., 132 m) St. 327 (off Uwajima, Ehime Pref., 216 m) and St. 420 (off Koshiki Islands, Kagoshima Pref., 132 m).

Distribution: Kyushu; Shikoku and Honshu.

Remarks: This deep sea species is very characteristic in having the pearly shell on which distinct lamellae are placed distantly. The growth lines are lamellate but not fimbriate. The fixation is whether by the left valve or the right.

Superfamily Cardiacea

Family Cardiidae

173. *Laevicardium undatopictum* (PILSBRY)

1904 *Cardium hungerfordi undatopictum* PILSBRY, Proc. Acad. Nat. Sci. Phila., 56, p. 556, pl. 40, fig. 14, 15.

1904 *Cardium hungerfordi stigmaticum* PILSBRY, l. c., p. 556, pl. 41, figs. 13, 14.

Locality: St. 4 (off Bôsô Peninsula, 287 m).

Distribution: Kyushu; Shikoku and Honshu (north to Bôsô Peninsula and Toyama Bay).

174. *Fulvia mutica* (REEVE)

1844 *Cardium muticum* REEVE, Conch. Icon., sp. 32.

1860 *Cardium japonicum* DUNKER, Mal. Blatt., 6, p. 223.

1904 *Cardium annae* PILSBRY, Proc. Acad. Nat. Sci. Phila., 56, p. 557, pl. 40. fig. 20.

Locality: St. 248 (Sagami Bay, 170 m).

Distribution: China; Korea; Ryukyu; Kyushu; Shikoku and Honshu.

175. *Clinocardium californiense* (DESHAYES)

1839 *Cardium californiense* DESHAYES, Rev. Zool. Soc. Cuv. 2, p. 360.

Localities: Sts. 439 and 440 (off Gotô Islands, 155 m and 152 m); Sts. 459 and 475 (off Tsushima, 115 m and 192 m); St. 481 (off Urusan, Korea, 143 m); and St. 634 (off Oga Peninsula, 84 m).

Distribution: Maritime Prov. of Siberia; Korea; Kamtchatka; Saghalien; Kuriles; Hokkaido; Honshu and north-western Kyushu.

176. *Keenaea samarangae* (MAKIYAMA)

(Pl. I, fig. 29)

1850 *Cardium modestum* A. ADAMS et REEVE, Voy. Samarang, Moll., p. 77, pl. 22, fig. 6 (*non* PHILIPPI 1849).

1872 *Cardium adamsi* TRYON, Amer. Jour. Conch., 7, p. 267, (*non* A. ADAMS et REEVE 1850),

1934 *Cardium samarangae* MAKIYAMA, Mem. Coll. Sci. Kyoto Imp. Univ., (B) 10 (2), p. 143.

Localities: Sts. 11 and 12 (off Chôshi, Chiba Pref., 375 m and 325 m); St. 212 (off Tanabe, Wakayama Pref., 181 m); Sts. 240, 241 and 255 (Sagami Bay, 192 m, 476 m and 263 m); Sts. 259, 276, 279 and 286 (Suruga Bay, 188 m, 77 m, 155 m and 123 m); Sts. 322 (Bungo Channel, 110 m); Sts. 329 and 331 (off Ashizuri-zaki, Kochi Pref., 296 m and 344 m); St. 347 (off Kanno-ura, Kochi Pref., 126 m); Sts. 371 and 377 (Enshû-nada, 84 m and 82 m); St. 425 (off Koshiki Islands, 300 m); Sts. 432, 433, 437, 439, 441 and 448 (off Gotô Islands, 148 m, 168 m, 307 m, 155 m, 353 m and 157 m); St. 455 (off Quelpart Island, 90 m); Sts. 457, 459, 468, 474, 475, and 477 (off Tsushima, 112 m, 115 m, 112 m, 219 m, 192 m and 99 m); Sts. 479 and 481 (off Urusan, Korea, 148 m and 143 m); Sts. 484, 486 and 488 (off Yamaguchi Pref., 93 m, 139 m and 406 m); Sts. 491, 492, 493, 494, 495, 497, 498 (off Shimane Pref., 112 m, 132 m, 124 m, 110 m, 146 m, 143 m, and 139 m); Sts. 503, 504 and 512 (off Oki Islands, 146 m, 106 m and 141 m); Sts. 517, 523 and 530 (off Tottori Pref., 214 m, 181 m and 183 m); Sts. 540 and 541 (off Yosa Peninsula, Kyoto Pref., 123 m and 150 m); Sts. 572 and 575 (off Noto Peninsula, 132 m and 123 m); St. 608 (off Sado Island, 150 m) and Sts. 622, 634 and 639 (off Akita Pref., 218 m, 84 m and 196 m).

Distribution: Kyushu; Shikoku and Honshu (north to Bôsô Peninsula and Oga Peninsula).

177. *Frigidocardium eos* (KURODA)

(Pl. II, fig. 1)

1929 *Cardium eos* KURODA, Venus, 1, p. 93, pl. 3, fig. 5.

Localities: St. 4 (Bôsô Peninsula, 287 m); St. 221 (off Tosa Bay, 209); Sts. 259, 284 and 286 (Suruga Bay, 188 m, 71 m and 123 m); St. 300 (off Toi-zaki, Miyazaki Pref., 110 m); St. 365 (off Hamashima, Mie Pref., 93 m); St. 322 (Bungo Channel, 110 m); Sts. 431, 438, 439, 440, 444, 445, 447, 449 (off Gotô Islands, 152 m, 219 m, 155 m, 152 m, 194 m, 73 m, 90 m and 155 m); St. 466 (off Tsushima, 110 m); St. 469 (off Iki Island, 91 m); St. 471 (off Yamaguchi Pref., 90 m) and St. 494 (off Shimane Pref., 110 m).

Distribution: Kyushu; Shikoku and Honshu (north to Bôsô Peninsula and off Shimane Pref.).

178. *Frigidocardium exasperatum* (SOWERBY)1841 *Cardium exasperatum* SOWERBY, Proc. Zool. Soc. London, p. 106 (1840).

Locality: St. 220 (off Tosa Bay, 234 m); St. 345 (off Muroto-zaki, Kôchi Pref., 165–199 m) and St. 438 (off Gotô Islands, 219 m).

Distribution: China; Formosa; Kyushu; Shikoku and Honshu (Wakayama Pref.).

179. *Trifaricardium nomurai* KURODA et HABE

(Pl. II, fig. 18)

1933 *Cardium cancellata* NOMURA, Sci. Rep. Tohoku Imp. Univ., (2) 16 (1), p. 81, pl. 3, figs. 9 a, b (*non* GMELIN 1791).

1951 *Trifaricardium nomurai* KURODA et HABE, Illust. Cat. Jap. Shells, 1 (13), p. 86.

Localities: St. 440 (off Gotô Islands, 152 m).

Distribution: Gotô Islands, Kyushu and Tosa Bay, Shikoku.

Superfamily Veneracea

Family Veneridae

180. *Circe (Redicirce) nana* MELVILL

(Pl. I, fig. 7, 8)

1898 *Circe nana* MELVILL, Mem. Manchester Lit. Soc., 42 (2), p. 31, pl. 2, fig. 9.

1931 *Circe salamensis* THIELE et JAECKEL, Deutsch. Tiefsee Exped., 21 (1), p. 233, pl. 4, fig. 106.

Localities: St. 12 (off Chôshi, Chiba Pref., 325 m); St. 220 (Tosa Bay, 234 m); St. 270 (Sagami Bay, 91 m); Sts. 276, 279 and 286 (Suruga Bay, 77 m, 155 m, and

73 m); St. 300 (off Toi-zaki, Miyazaki Pref., 110 m); St. 322 (Bungo Channel, 110 m); St. 345 (off Muroto-zaki, Kôchi Pref., 165-199 m); St. 347 (off Kannoura, Kôchi Pref., 126 m); St. 363 (off Owase, Mie Pref., 439 m); St. 376 (Enshû-nada, 64 m); St. 417 (off Makurazaki, Kagoshima Pref., 192 m); Sts. 432, 441, 445 and 452 (off Gotô Islands, 148 m, 353 m, 90 m and 154 m); St. 457 (Tsushima Strait, 112 m); St. 466 (off Iki Island, 110 m); Sts. 468, 474 and 475 (off Tsushima, 112 m, 219 m and 192 m); St. 470 (off Fukuoka Pref., 73 m); St. 481 (off Urusan, Korea, 143 m); Sts. 498, 520 and 521 (off Shimane Pref., 139 m, 75 m and 86 m) and St. 523 (off Tottori Pref., 181 m).

181. *Microcirce gordonis* (YOKOYAMA)

(Pl. I, figs. 3, 4)

1927 *Meretrix gordonis* YOKOYAMA, Jour. Fac. Sci. Imp. Univ. Tokyo, (92) 1 (10), p. 429, pl. 48, fig. 14 only.

Localities: St. 4 (off Bôsô Peninsula, 287 m); St. 447 (off Gotô Islands, 90 m); St. 521 (off Shimane Pref., 86 m); Sts. 459, 462 and 468 (off Tsushima, 115 m, 117 m and 112 m) and St. 483 (off Yamaguchi Pref., 130 m).

Distribution: Kyushu; Shikoku; Honshu and southern Hokkaido.

182. *Laevicirce soyoae* HABE

(Pl. I, figs. 10, 11)

1951 *Laevicirce gordonis* HABE, Gen. Jap. Shells, 2, p. 160, figs. 353-355.

Localities: St. 452 (off Gotô Islands, 154 m); Sts. 459 and 475 (off Tsushima, 115 m and 192 m); St. 466 (off Iki Island, 110 m) and St. 481 (off Urusan, Korea, 143 m).

Distribution: Gotô Islands and Tsushima Strait.

183. *Pitar (Pitarina) affine* (GMELIN)

1791 *Venus affinis* GMELIN, Syst. Nat. ed. 13, p. 3278.

1851 *Cytherea inflata* SOWERBY, Thes. Conch., 2, p. 637, pl. 133, fig. 127.

Localities: St. 205 (Kumano-nada, 224 m); St. 276 (Suruga Bay, 77 m); St. 447 (off Gotô Islands, 90 m); St. 468 (off Tsushima, 112 m); St. 481 (off Urusan, Korea, 143 m); Sts. 491 and 498 (off Shimane Pref., 112 m and 139 m) and St. 580 (Toyama Bay, 135 m).

Distribution: Widely distributed in the Indo-Pacific region; Kyushu; Shikoku and Honshu. (north to Kashima-nada, Ibaragi Pref. and Toyama Bay).

184. *Pitar (Agriopoma) noguchii* sp. nov.

Shell thin, inflated, ashy white, trigonally ovate, slightly truncated posteriorly;

surface ornamented by the growth lines only and covered by the tiny sand grains all over; lunule widely cordate, defined by the impressed line.

Length 21.7 mm., height 18.2 mm, and breadth 13.2 mm (type specimen)

Type locality: Off Hamamatsu, Shizuoka Pref., Honshu (collected by Mr. H. NOGUCHI).

Localities: St. 468 (off Tsushima, 112 m) and St. 483 (off Shimane Pref., 130 m).

Distribution: Kyushu; Shikoku and Honshu (north to Sagami Bay).

Remarks: This new species is very close to *P. (A.) japonica* KURODA et KAWAMOTO, but the former has an ashy white, thin shell with a very broad lunule, while the latter has a light orange shell with a less broad lunule.

185. *Pitar (Costellipitar) chordatum* (ROEMER)

(Pl. II, figs. 19, 20)

1867 *T. chordata* ROEMER, Mon. Venus, 1, p. 125, pl. 33, fig. 2.

1940 *Pitar hukarensis* NOMURA et HATAI, Saito Hô-on Kai Mus. Res. Bull. 19, p. 83, pl. 4, figs. 10 a, b.

Locality: St. 211 (off Tanabe, Wakayama Pref., 190 m).

Distribution: Kyushu; Shikoku and Honshu.

186. *Callista brevisiphonata* (CARPENTER)

1865 *Saxidomus brevisiphonatus* CARPENTER, Proc. Zool. Soc. London, p. 203.

1905 *Macrocallista chishimana* PILSBRY, Proc. Acad. Nat. Sci. Phila., 57, p. 118.

Localities: St. 57 (off Iwate Pref., 494 m).

Distribution: Northern Honshu; Hokkaido; Saghalien; Kuriles; Siberia.

187. *Callista chinensis* (HOLTEN)

1803 *Venus chinensis* HOLTEN, Enum. Syst. Conchyl., p. 20.

1818 *Venus pacifica* DILLWYN, Descript. Cat., 1, p. 175.

1855 *Cytherea sinensis* SOWERBY, Thes. Conch., 2, p. 624, pl. 131, figs. 80, 81.

1864 *Dione festiva* REEVE, Conch. Icon., sp., 4.

Localities: St. 4 (off Bôshô Peninsula, 287 m); St. 188 (Suruga Bay, 214 m); Sts. 211 and 352 (off Tanabe, Wakayama Pref., 190 m and 154 m); St. 274 (off Omae-zaki, Shizuoka Pref., 51 m); St. 298 (off Toi-zaki, Miyazaki Pref., 117 m); St. 371 (Enshu nada, 84 m); Sts. 484 and 488 (off Yamaguchi Pref., 93 m and 406 m) and St. 519 (off Tottori Pref., 81 m).

Distribution: China; Formosa; Kyushu; Shikoku and Honshu (north to Bôshô Peninsula and Toyama Bay).

188. *Sunetta (Cyclosunetta) menstrualis* (MENKE)1843 *Cytherea menstrualis* MENKE, Moll. Nov. Holl., sp. 43.1843 *Cytherea excavata* REEVE, Proc. Zool. Soc. London, p. 123 (*non* MORTON 1834).1864 *Meroe magnifica* REEVE, Conch. Icon., sp. 2.

Localities: St. 255 (Suruga Bay, 263 m) and Sts. 440 and 452 (off Gotô Islands, 152 m and 154 m).

Distribution: Widely distributed in the Indo-Pacific region; Kyushu; Shikoku and Honshu (north to Bôshô Peninsula).

189. *Sunetta (Cyclosunetta) subquadrata* (SOWERBY)1851 *Meroe subquadrata* SOWERBY, Thes. Conch., 2, p. 610, pl. 126, fig. 9.

Localities: St. 286 (Suruga Bay, 123 m) and St. 325 (off Uwajima, Ehime Pref., 210 m).

Distribution: Kyushu; Shikoku and Honshu (north to Suruga Bay).

190. *Dosinia (Phacosoma) pubescens* (PHILIPPI)1847 *Cytherea pubescens* PHILIPPI, Abbild. Besch., 3, p. 26, pl. 8, fig. 3.

Locality: St. 284 (Suruga Bay, 71 m); St. 468 (off Tsushima, 112 m); Sts. 481 and 483 (off Yamaguchi Pref., 143 m and 130 m); St. 492 (off Shimane Pref., 132 m) and Sts. 617 and 639 (off Akita Pref., 106 m and 196 m).

Distribution: Kyushu; Shikoku and Honshu.

191. *Dosinia (Phacosoma) troscheli* LISCHKE1873 *Dosinia troscheli* LISCHKE, Mal. Blatt., 21, p. 24.

Locality: St. 329 (off Uwajima, Ehime Pref., 296 m).

Distribution: Kyushu; Shikoku and Honshu; southern Korea and North China.

192. *Dosinia (Bonartemis) iwakawai* OYAMA (MS).

Locality: St. 4 (off Bôshô Peninsula, 287 m).

Distribution: Kyushu; Shikoku and Honshu.

Remarks: This new species yet undescribed resembles *D. (B.) (histrion)* (GMELIN) in shell appearance.

193. *Venus (Ventricolaria) toreuma* GOULD

(Pl. II, fig. 8)

1850 *Venus toreuma* GOULD, Proc. Boston Soc. Nat. Hist., 3, p. 277.1853 *Venus jukesii* DESHAYES, Cat. Conch. Brit. Mus., p. 100.1853 *Venus sculpta* DESHAYES, Proc. Zool. Soc. London, p. 3.

Localities: St. 327 Uwajima, Ehime Pref., 216 m) and St. 445 (off Gotô Islands, 73 m).

Distribution: Widely distributed in the Indo-Pacific region, Kyushu; Shikoku and Honshu.

194. *Venus (Ventricoloidea) foveolata* SOWERBY

(Pl. II, fig. 20)

1853 *Venus forveolata* SOWERBY, Thes. Conch., 2, p. 730, pl. 154, fig. 46.

Localities: St. 12 (off Chôshi, Chiba Pref., 325 m) Sts. 188 and 377 (off Omae-zaki, 214 m and 82 m); St. 193 (Enshû-nada, 265 m); Sts. 211 and 352 (off Tanabe, Wakayama Pref., 190 m and 154 m); Sts. 220, 221, 222, 340 and 342 (Tosa Bay, 234 m, 209 m, 210 m, 481 m and 288–527 m); Sts. 248 and 249 (Sagami Bay, 170 m and 229 m); Sts. 259, 275, 279, 286 and 383 (Suruga Bay, 188 m, 62 m, 155 m, 123 m and 353 m); St. 300 (off Toizaki, Miyazaki Pref., 110 m); Sts. 309 and 319 (off Miyazaki Pref., 472 m and 210 m); St. 345 (off Muroto-zaki, Kôchi Pref., 165–199 m); St. 347 (off Kannoura, Kôchi Pref., 126 m); Sts. 365 and 366 (off Hamashima, Mie Pref., 93 m and 494 m); St. 392 (Kii Channel, 152 m); St. 431 (off Amakusa, 152 m); Sts. 432, 433, 445, 448 and 452 (off Gotô Islands, 148 m, 168 m, 73 m, 157 m and 154 m); Sts. 457 and 458 (Tsushima Strait, 112 and 81 m); Sts. 459, 462, 466 and 468 (off Tsushima, 115 m, 117 m, 110 m and 112 m); St. 470 (off Hakata Bay, Fukuoka Pref., 73 m); St. 476 (off Pusan, Korea, 84 m); St. 481 (off Urusan Korea, 143 m); St. 483 (off Yamaguchi Pref., 130 m); Sts. 491, 492, 493 and 494 (off Shimane Pref., 112 m, 132 m, 124 m and 110 m); Sts. 503 and 504 (off Oki Islands, 146 m and 106 m) and St. 546 (Wakasa Bay, 101 m).

195. *Placamen tiara* (DILLWYN)

(Pl. II, fig. 7)

1817 *Venus tiara* DILLWYN, Descript. Cat., 1, p. 162.

1846 *Venus foliacea* PHILIPPI, Abbild. Besch., 2 (4), p. 107, pl. 5, fig. 1.

Localities: St. 4 (Bôsô Peninsula, 287 m); St. 211 (off Tanabe, Wakayama Pref., 190 m); St. 298 (off Toi zaki, Miyazaki Pref., 117 m); St. 322 (Bungo Channel, 110 m); St. 470 (off Hakata Bay, Fukuoka Pref., 73 m); Sts. 484 and 488 (off Yamaguchi Pref., 93 m and 406 m) and St. 494 (off Shimane Pref., 110 m).

196. *Callanaitis hiraseana* KURODA

(Pl. II, fig. 12)

1930 *Callanaitis hiraseana* KURODA, Venus, 2, p. 2, text-fig. 1.

Locality: St. 345 (off Muroto-zaki, 165–199 m).

Distribution: Ryukyu; Kyushu; Shikoku and Honshu (Wakayama Pref.).

197. *Veremolpa minuta* (YOKOYAMA)

1820 *Chione minuta* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 39 (6), p. 122, pl. 8, fig. 14.

Localities: St. 4 (Bôshô Peninsula, 287 m); St. 24 (off Fukushima Pref., 428 m); St. 211 (off Tanabe Bay, Wakayama Pref., 190 m); St. 276 (Suruga Bay, 77 m); St. 300 (off Toi-zaki, Miyazaki Pref., 110 m); St. 324 (off Uwajima, Ehime Pref., 106 m); St. 345 (off Muroto-zaki, Kôchi Pref., 165-199 m); Sts. 432, 436 and 447 (off Gotô Islands, 148 m, 549 m and 90 m); St. 470 (off Hakata Bay, Fukuoka Pref., 73 m); Sts. 484 and 488 (off Yamaguchi Pref., 93 m and 406 m) and Sts. 494, 498 and 520 (Off Shimane Pref., 110 m, 139 m and 75 m).

Distribution: Kyushu; Shikoku and Honshu.

198. *Veremolpa mindanensis* (SMITH)

1885 *Venus (Chione) mindanensis* SMITH, Chall. Rep. Lamellibr., p. 130, pl. 3, figs. 4, a, b.

Localities: Sts. 220, 221 and 222 (Tosa Bay, 234 m, 209 m and 210 m); St. 259 (Suruga Bay, 188 m); Sts. 298 and 304 (off Toi-zaki, Miyazaki, Pref., 117 m and 241 m) and St. 483 (off Yamaguchi Pref., 279 m).

Distribution: East Indies; Philippines; Kyushu; Shikoku and Honshu (north to Suruga Bay and off Yamaguchi Pref.).

199. *Gomphina neastartoides* (YOKOYAMA)

1922 *Venus neastartoides* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 44 (1), p. 149, pl. 11, figs. 10, 11.

Locality: 392 (Kii Channel, 61 m).

Distribution: Kyushu and Honshu.

200. *Liocyma aniwana* DALL

(Pl. II, fig. 9)

1907 *Liocyma aniwana* DALL, Smiths. Misc. Coll., 50, p. 172.

Localities: St. 487 (off Yamaguchi Pref., 194 m) and St. 652 (Tsugaru Strait, 110 m).

Distribution: Siberia; Saghalien; Kuriles; Hokkaido and Japan Sea.

201. *Liocyma beckii* DALL

1870 *Liocyma beckii* DALL, Proc. Boston Soc. Nat. Hist., 13, p. 257.

Localities: St. 10 (off Chôshi, Chiba Pref., 205 m) and St. 152 (off Iwate Pref., 377 m).

Distribution: East coast of Honshu.

202. *Callithaca adamsi* (REEVE)

1863 *Venus adamsi* REEVE, Conch. Icon., sp. 77.

Locality: St. 475 (off Tsushima, 192 m).

Distribution: Saghalien; Kuriles; Hokkaido; North-east coast of Honshu; Korea and Siberia.

203. *Protothaca jedoensis* (LISCHKE)

1874 *Venus jedoensis* LISCHKE, Jahrb. Deutsch. Malak. Ges., 1, p. 57.

1901 *Venus hirasei* PILSBRY, Proc. Acad. Nat. Sci. Phila., 53, pp. 205, 400, pl. 19, fig. 1 and pl. 20, fig. 20.

Locality: St. 468 (off Tsushima, 112 m).

Distribution: North China; Korea; Kyushu; Shikoku; Honshu and southern Hokkaido.

204. *Tapes (Amygdala) japonica* DESHAYES

1853 *Tapes japonica* DESHAYES, Cat. Conch. Brit. Mus., p. 181.

1864 *Tapes semidecussata* REEVE, Conch. Icon., sp. 67.

Localities: St. 12 (off Chôshi, Chiba Pref., 325 m) and St. 468 (off Tsushima, 112 m).

Distribution: North China; Korea; Kyushu; Shikoku; Honshu; Hokkaido, Saghalien and Siberia.

205. *Paphia euglypta* (PHILIPPI)

1847 *Venus euglypta* PHILIPPI, Zeitschr. Malak., p. 89.

Localities: St. 4 (off Bôso Peninsula, 287 m) and St. 248 (Sagami Bay, 170 m).

Distribution: Kyushu; Shikoku; Honshu and Korea.

206. *Paphia schnelliana* (DUNKER)

1866 *Tapes schelliana* DUNKER, Novit. Conch., p. 75, pl. 25, figs. 7-9.

Locality: St. 493 (off Shimane Pref., 124 m).

Distribution: Kyushu; Shikoku and Honshu (north to Bôso Peninsula and Noto Peninsula).

207. *Paphia amabilis* (PHILIPPI)

1847 *Venus amabilis* PHILIPPI, Zeitschr. Malak., p. 90.

Locality: St. 4. (Off Bôso Peninsula, 287 m).

Distribution: Kyushu; Shikoku and Honshu.

208. *Paphia vernicosa* (GOULD)1861 *Tapes vernicosa* GOULD, Proc. Boston Soc. Nat. Hist., 8, p. 30.1877 *Tapes greefei* DUNKER, Malak. Blatt., 24, p. 73.*Localities*: St. 483 (off Yamaguchi Pref., 130 m).*Distribution*: Kyushu; Shikoku and Honshu (north to Bôso Peninsula).209. *Clementia vatheleti* MABILLE1901 *Clementia vatheleti* MABILLE, Bull. Philom. Paris, (8) 3, p. 57.*Locality*: St. 440 (Gotô Islands, 152 m) and St. 476 (off Pusan, Korea, 84 m).*Distribution*: Kyushu; Shikoku; Honshu and Korea.210. *Irus mitis* (DESHAYES)1854 *Venerupis mitis* DESHAYES, Proc. Zool. Soc. London, p. 5 (1853).1882 *Venerupis semipurpurata* DUNKER, Index Moll. Mar. Japan., p. 208.*Locality*: St. 468 (off Tsushima, 112 m).*Distribution*: Formosa; Kyushu; Shikoku and Honshu.

Family Petricolidae

211. *Lajonkairia divaricata* (LISCHKE)

(Pl. II, fig. 6)

1872 *Lucinopsis divaricata* LISCHKE, Malak. Blatt., 19, p. 108.*Localities*: St. 4 (off Bôso Peninsula, 287 m).*Distribution*: Kyushu; Shikoku and Honshu.

Superfamily Tellinacea

Family Gariidae

212. *Gari anomala* (DESHAYES)1855 *Psammobia anomala* DESHAYES, Proc. Zool. Soc. London, p. 320.*Localities*: St. 432 (off Gotô Islands, 148 m); St. 468 (off Tsushima, 112 m); St. 470 (off Hakata Bay, Fukuoka Pref., 73 m) and St. 483 (off Yamaguchi Pref., 130 m).*Distribution*: Kyushu; Shikoku; Honshu and Philippines.213. *Gari hosoyai* sp. nov.

This new species closely resembles *Gari radiata* DUNKER in shape and colouration, but the former has densely set oblique threads on the surface, while in the latter, the

oblique threads are quite missing and the growth lines on the postero-dorsal area are distinctly marked. Also the former is smaller than the latter even in the adult stage. The specific name is dedicated to the late Mr. Kakujiro HOSOYA who had collected this interesting species from Sagami Bay.

Length 29.7 mm, height 15.0 mm and breadth 7.3 mm (type specimen)

Length 29.7 mm, height 14.7 mm and breadth 8.0 mm (paratype specimen)

Type locality: Sagami Bay (collected by Mr. K. HOSOYA).

Locality: St. 4 (Bôsô Peninsula, 287 m).

Distribution: Kyushu; Shikoku and Honshu (north to Bôsô Peninsula).

214. *Psammocola kazusensis* (YOKOYAMA)

1922 *Psammobia kazusensis* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 44 (1), p. 136, pl. 9, fig. 4.

Locality: St. 78 (off Shiriya-zaki, Shimokita Peninsula, 102 m).

Distribution: Hokkaido and northern Honshu.

Family Semelidae

215. *Abra kyurokusimana* (NOMURA et HATAI)

1940 *Tellina (Arcopagia) kyurokusimana* NOMURA et HATAI, Saitô Hô-on Kai Mus. Res. Bull., 19, p. 85, pl. 4, figs. 16 a-c.

Localities: Sts. 259 and 286 (Suruga Bay, 188 m and 123 m); St. 252 (Sagami Bay, 286 m) and St. 295 (off Tanegashima, 154 m).

Distribution: Kyushu; Shikoku and Honshu.

Remarks: This species has been reported as a member of the tellinid genus *Arcopagia*, but this has an internal ligamental groove on the hinge plate. Therefore it should be transferred to this semelid genus.

216. *Abra soyoae* sp. nov.

(Pl. I, figs. 12, 13)

Shell thin, white or light yellow, smooth and polished, ovate, roundedly produced anteriorly and obliquely truncated posteriorly, moderately inflated; beak small but pointed; the antero-dorsal margin longer than the postero-dorsal; the hinge plate with two cardinal teeth and in the right valve anterior and posterior lateral teeth present far from the cardinal ones, the anterior tooth being stronger than the posterior; mantle line with a deep sinus.

Length 12.2 mm, height 9.2 mm, and breadth 5.6 mm (conjoined valves) (type specimen)

Type locality: St. 452 (off Gotô Islands, 154 m).

Localities: St. 304 (off-Toi zaki, Miyazaki Pref., 241 m); St. 321 (off Miyazaki Pref., 457 m) and Sts. 436 and 452 (off Gotô Islands, 549 m and 154 m).

Distribution: Kyushu and Shikoku.

Remarks: This shell is very close to that of *Abrina sibogai* PRASHAD in shape, but the former has the distinct lateral teeth on the right valve.

217. *Abra fujitai* sp. nov.

Shell rather small, white, smooth and polished, elongate ovate, rounded anteriorly and attenuated posteriorly and pointed at the posterior end, subequilateral, inflated; beak situated at about middle of the dorsal margin, ventral margin gently arcuated; hinge plate with two cardinal teeth and a ligamental groove and in the right valve the lamellate lateral teeth present distinctly, parallel to the dorsal margin.

Length 9.9 mm, height 7.2 mm and breadth 4.5 mm (type specimen)

Length 9.7 mm, height 6.9 mm and breadth 4.2 mm (paratype specimen)

Length 8.5 mm, height 6.2 mm and breadth 3.9 mm (paratype specimen)

Type locality: Tosa Bay, Shikoku (collected by Mr. A. TERAMACHI).

Locality: St. 452 (off Gotô Islands, 154 m).

Distribution: Kyushu and Shikoku.

Remarks: This new species is characterized by the inflated shell which is pointed at the posterior end. *Abrina inanis* PRASHAD is an allied form, but has the less inflated shell which has no lateral tooth.

218. *Abrina sibogai* (PRASHAD)

1932 *Abra sibogai* PRASHAD, Siboga Exped., Lamellibr., p. 200, pl. 6, figs. 1, 2.

Locality: St. 391 (off Miyazaki Pref., 84 m).

Distribution: East Indies; Kyushu; Shikoku and Honshu.

219. *Abrina kinoshitai* KURODA et HABE sp. nov.

Shell thin, white, smooth and polished, iridescent, elongated ovate, inequilateral, strongly produced to the rounded anterior end and attenuated to the posterior end; beak small and pointed, antero-dorsal margin slightly curved and longer than the nearly straight postero-dorsal; ventral margin gently curved; hinge plate weak and with two small cardinal teeth and a distinct ligamental groove on each valve, without any lateral tooth; mantle line with a deep sinus.

Length 12.4 mm, height 7.9 mm and breadth 1.7 mm (right valve) (type specimen)

Length 10.7 mm, height 6.6 mm and breadth 1.5 mm (right valve) (paratype specimen)

Length 10.6 mm, height 6.6 mm and breadth 1.5 mm (left valve) (paratype specimen)

Type locality: St. 371 (off Miyazaki Pref., 84 m).

Localities: St. 371 (off Miyazaki Pref., 84 m); St. 475 (off Tsushima, 192 m) and St. 483 (off Yamaguchi Pref., 130 m).

Distribution: Kyushu; Shikoku and Honshu.

Remarks: This species is named in honour of Dr. Toraichiro KINOSHITA who had firstly collected this interesting species from off Wakayama Pref., Honshu.

Family Tellinidae

220. *Cadella delta* (YOKOYAMA)

1922 *Tellina delta* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Totyo, 44 (1), p. 141, pl. 10, figs. 8-10.

Localities: St. 452 (off Gotô Islands, 154 m) and St. 459 (off Tsushima, 115 m).

Distribution: Kyushu; Shikoku and Honshu.

221. *Cadella lubrica* (GOULD)

(Pl. II, fig. 25)

1861 *Tellina lubrica* GOULD, Proc. Boston Soc. Nat. Hist., 8, p. 28.

1935 *Tellina kesenensis* NOMURA et HATAI, Saitô Hô-on Kai Mus. Res. Bull., 5, p. 15, pl. 1, figs. 1 a, b.

Localities: St. 479 (off Urusan, Korea, 148 m) and St. 495 (off Shimane Pref., 146 m).

Distribution: Hokkaido and northern Honshu; Japan Sea and Siberia.

222. *Merisca tokunagai* IKEBE

1936 *Arcopagia* (*Merisca*) *tokunagai* IKEBE, Venus, 6 (4), p. 203, fig. 3.

Localities: St. 248 (Sagami Bay, 170 m); St. 428 (off Amakusa, 119 m); St. 441 (off Gotô Islands, 353 m); St. 481 (off Tsushima, 143 m); St. 491 (off Yamaguchi, 112 m) St. 495 (off Shimane Pref., 146 m) and St. 541 (off Yosa Peninsula, Kyoto Pref., 150 m).

Distribution: Kyushu; Shikoku and Honshu (north to Sagami Bay and Wakasa Bay).

223. *Merisca margaritina* (LAMARCK)

1818 *Tellina margaritina* LAMARCK, Anim. s. Vert., 5, p. 525.

1905 *Tellina serricostata* TOKUNAGA, Jour. Coll. Sci. Imp. Univ. Tokyo, 21, p. 43, pl. 2, figs. 32 a, b.

Localities: St. 12 (Chôshi, Chiba Pref., 325 m); Sts. 211 and 352 (off Tanabe, Wakayama Pref., 190 m and 154 m); St. 221 (Tosa Bay, 209 m); St. 298 (off Toi-zaki, Miyazaki Pref., 117 m); St. 365 (off Hamashima, Mie Pref., 93 m); St. 377 (off Omae-zaki, Shizuoka Pref., 82 m); St. 432 (off Gotô Islands, 148 m); St. 466 (off Iki Island, 110 m); St. 470 (off Hakata Bay, Fukuoka Pref., 73 m); St. 481 (off Urusan, Korea, 143 m); Sts. 483, 484 and 488 (off Yamaguchi Pref., 130 m, 93 m and 406 m); Sts. 494, 497 and 520 (off Shimane Pref., 110 m, 143 m and 75 m) and St. 523 (off Tottori Pref., 181 m).

Distribution: Kyushu; Shikoku and Honshu.

224. *Merisca subtruncata* (HANLEY)

1844 *Tellina subtruncata* HANLEY, Proc. Zool. Soc. London, p. 149.

1906 *Tellina ojiensis* TOKUNAGA, Jour. Coll. Sci. Imp. Univ. Tokyo, 21 (2), p. 44, pl. 2, fig. 34.

Locality: St. 4 (off Bôso Peninsula, 287 m).

Distribution: Kyushu; Shikoku and Honshu.

225. *Elliptotellina fabrefacta* (PILSBRY)

(Pl. I, fig. 21)

1904 *Tellina fabrefacta* PILSBRY, Proc. Acad. Nat. Sci. Phila., 56, p. 555, pl. 41, figs. 11, 12.

Locality: St. 4 (Bôso Peninsula, 287 m).

Distribution: East Indies; Ryukyu, Kyushu; Shikoku and Honshu (north to Bôso Peninsula).

226. *Macoma tokyoensis* MAKIYAMA

1865 *Tellina dissimilis* MARTENS, Ann. Mag. Nat. Hist., (3) 16, p. 430 (*non* DESHAYES 1854).

1927 *Macoma tokyoensis* MAKIYAMA, Mem. Coll. Sci. Kyoto Imp. Univ., (B) 3 (1), p. 50.

Locality: St. 483 (off Yamaguchi Pref., 130 m).

Distribution: Kyushu; Shikoku, Honshu and Korea.

227. *Semelangulus miyatensis* (YOKOYAMA)

1920 *Tellina miyatensis* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 39 (6), p. 115, pl. 7, fig. 18.

Locality: St. 4 (off Bôso Peninsula, 287 m).

Distribution: Kyushu (Ariake Bay) and Honshu.

Remarks: This genus was allocated in the family Semelidae by IREDALE in having the long lamellate lateral tooth parallel to the dorsal margin and an internal ligament,

but is too close to the genera *Moerella* and *Fabulina* in shape. Therefore this genus is still retained in the Tellinidae.

228. *Moerella nishimurai* KURODA et HABE sp. nov.

Shell small, thin, elongate oval, very inequilateral, compressed, semitranslucently white to pale yellow, shining; posterior margin shortly rostrated and the anterior side elongate, rounded at the end; surface sculpture concentric; postero-dorsal margin short, very oblique and the antero-dorsal margin nearly straight; right valve with two cardinal teeth on the narrow hinge plate and a lamellate lateral tooth well developed in parallel to the dorsal margin; no lateral tooth in the left valve.

Length 9.5 mm, height 5.7 mm, and breadth 3.0 mm (type specimen)

Length 9.2 mm, height 5.6 mm, and breadth 2.9 mm (paratype specimen)

Type locality: Funagoshi, Oga city, Akita Pref., Honshu (collected by Mr. T. NISHIMURA).

Localities: St. 4 (off Bôshô Peninsula, 287 m); Sts. 459 and 562 (off Tsushima, 115 m and 117 m).

Distribution: Kyushu and Honshu.

229. *Fabulina nitidula* (DUNKER)

1872 *Tellina nitidula* DUNKER, Mal. Blatt., 6, p. 236.

Localities: St. 4 (off Bôshô Peninsula, 287 m); Sts. 462 (off Tsushima, 117 m); Sts. 483 and 488 (off Yamaguchi Pref., 130 m and 406 m) and St. 625 (off Akita Pref., 51 m).

Distribution: Formosa; Kyushu; Shikoku and Honshu.

230. *Fabulina soyoae* sp. nov.

Shell elongate ovate, thin, shining, orange yellow, depressed; sculpture of fine concentric lines of growth; beak small, situated far back; anterior dorsal margin longer than the posterior dorsal; anterior margin rounded and the posterior obliquely truncated; ventral margin slightly convex.

Length 17.7 mm, height 1.00 mm and breadth 2.5 mm (left valve) (type specimen)

Type locality: St. 483 (off Yamaguchi Pref.).

Localities: St. 413 (off Ôsumi Peninsula, 249 m) and St. 483 (off Yamaguchi Pref., 130 m).

Remarks: This new species somewhat approaches to *Fabulina nitidula* (DUNKER), but may be easily distinguished from that species in having the less transversely oval shell with the highly polished surface and the more strongly rostrated hind part.

231. *Fabulina abyssicola* sp. nov.

Shell transversely ovate, polished, a little inflated, attenuated posteriorly and obliquely and narrowly truncated at the posterior end; anterior side longer than the posterior, rounded extremity; surface concentrically striated and orange yellow; left valve with two cardinal teeth on the narrow hinge.

Length 21.1 mm, height 12.2 mm and breadth 3.4 mm (left valve) (type specimen)

Length 20.2 mm, height 11.2 mm and breadth 2.9 mm (left valve) (paratype specimen)

Type locality: St. 220 (Tosa Bay).

Localities: St. 220 (Tosa Bay, 234 m); St. 249 (Sagami Bay, 229 m) and Sts. 433 and 439 (off Gotô Islands, 168 m and 155 m).

Distribution: Kyushu; Shikoku and Honshu (north to Sagami Bay).

Remarks: This is very characteristic in having the transversely ovate shell with the short hind rostration and the distinctly striated growth lines on the surface.

232. *Bathytellina citrocarnea* KURODA et HABE gen. et sp. nov.

Shell elongate oval, thin but rather solid, moderately inflated, orange rose, especially deep in color at the flexuous postero-dorsal area. beak small, situated at the posterior third of dorsal margin; the antero-dorsal margin being longer than the postero-dorsal; the anterior margin rounded and the posterior margin slightly rostrated and weakly truncated at the extremity; the hinge plate of the right valve with two cardinal teeth, the anterior tooth of which is stronger than the posterior and bifurcate and anterior and posterior lateral teeth far from the cardinal teeth; in the left valve no lateral teeth present; mantle line with a deep posterior sinuation.

Length 19.4 mm, height 12.1 mm and breadth 6.2 mm (type specimen)

Length 18.2 mm, height 11.5 mm and breadth 5.5 mm (paratype specimen)

Type locality: Tosa Bay, Shikoku (collected by Mr. A. TERAMACHI).

Localities: St. 216 (off Kannoura, Kôchi Pref., 274 m); St. 220 (Tosa Bay, 234 m); Sts. 437 and 439 (off Gotô Islands, 307 m and 155 m) and St. 475 (off Tsushima, 192 m).

Distribution: Kyushu; Shikoku and Honshu (north to Sagami Bay).

Remarks: This new deep sea tellinid species has a different hinge armature from the genera *Fabulina* and *Moerella* despite of the close resemblance of shape. Therefore this is proposed a new generic name *Bathytellina*.

233. *Pharaonella perrieri* (BERTIN)

1878 *Tellina perrieri* BERTIN, Rev. Tellinides, p. 255, pl. 8, fig. 8.

1903 *Tellina consanguinea* SOWERBY, Ann. Mag. Nat. Hist., (7) 12, p. 500.

Locality: St. 4 (Bôsô Peninsula, 287 m).

Distribution: Kyushu, Shikoku and Honshu.

Order ADAPEDONTA

Superfamily Solenacea

Family Solenidae

234. *Solen (Solenarius) krusensterni* SCHRENCK

1867 *Solen krusensterni* SCHRENCK, Reisen Amurl. u. Nordjap., 2, p. 594, pl. 25, figs. 9-12.

Locality: St. 274 (Suruga Bay, 51 m).

Distribution: Saghalien; Korea; Honshu; Shikoku and Kyushu.

235. *Solen (Solenarius) sp.*

Localities: St. 211 (off Tanabe, Wakayama Pref., 190); St. 248 (Sagami Bay, 178 m); St. 327 (off Uwajima, Ehime Pref., 216 m); Sts. 459 and 468 (off Tsushima, 115 m and 112 m) and St. 488 (off Yamaguchi Pref., 408 m).

Distribution: Kyushu; Shikoku and Honshu.

Remarks: This is *Solen luzonica* REEVE by KIRA 1954 (Illust. Shell Japan, pl. 61, fig. 1). But it is not identical with that species. All specimens collected during this survey are imperfect. Therefore it remains as an undetermined species.

236. *Solecurtus wilsoni* TRYON

1870 *Solecurtus wilsoni* TRYON, Amer. Jour. Conch., 6, p. 23, pl. 1, fig. 2.

Localities: Sts. 249 and 276 (off Sagami Bay, 229 m and 77 m) and St. 523 (off Tottori Pref., 181 m).

Distribution: China; Kyushu and Honshu.

Superfamily Mactracea

Family Mesodesmatidae

237. *Spondervillia bisculpta* (GOULD)

(Pl. I, fig. 14)

1861 *Ervillia bisculpta* GOULD, Proc. Boston Soc. Nat. Hist., 8, p. 23.

Locality: St. 4 (off Bôso Peninsula, p. 287 m).

Distribution: Siam Bay; Kyushu; Shikoku and Honshu (north to Bôso Peninsula).

Family Mactridae

238. *Mactra sulcataria* REEVE

1854 *Mactra sulcataria* REEVE, Conch. Icon., sp. 5.

1904 *Mactra carneopicta* PILSBRY, Proc. Acad. Nat. Sci. Phila., 56, p. 550, pl. 38, figs. 1-3.

Localities: St. 4 (off Bôso Peninsula, 287 m) and St. 210 (off Wakayama Pref., 165 m).

Distribution: China; Korea; Kyushu; Honshu; Hokkaido and Saghalien.

239. *Macra crossei* (DUNKER)

1877 *Trigonella crossei* DUNKER, Mal. Blatt., 24, p. 74.

Localities: St. 298 (off Toi-zaki, Miyazaki Pref., 117 m) and St. 451 (off Gotô Islands, 187 m).

Distribution: Kyushu and Honshu.

240. *Macra iridescens* KURODA et HABE sp. nov.

Shell small, thin, white, smooth, except striated antero- and postero-dorsal areas, polished and iridescens, trigonal in shape, moderately inflated; a rather distinct keel runs from the beak to the postero-ventral corner and also an obtuse keel from the beak to the antero-ventral corner; ventral margin weakly curved.

Length 14.5 mm, height 10.5 mm and breadth 6.8 mm (type specimen)

Length 14.0 mm, height 10.7 mm and breadth 3.6 mm (right valve) (paratype specimen).

Length 17.4 mm, height 12.6 mm and breadth 3.9 mm (right valve) (specimen from St. 444).

Type locality: Off Yakushima (ex HIRASE).

Localities: St. 444 (off Gotô Islands, 194 m).

Distribution: Kyushu and Honshu (Wakayama Pref.).

Remarks: This species differs from *Macra crossei* (DUNKER) in having the white and inflated trigonal shell with a distinct keel from the beak to the postero-ventral corner.

241. *Oxyperas bernardi* (PILSBRY)

(Pl. II, fig. 13)

1904 *Spisula bernardi* PILSBRY, Proc. Acad. Nat. Sci. Phila., 56, p. 550, pl. 39, figs. 4-6.

Localities: St. 251 (Sagami Bay, 165 m); St. 259 (Suruga Bay, 188 m); St. 319 (off Miyazaki Pref., 210 m); St. 322 (Bungo Channel, 110 m); St. 384 (the entrance of Ise Bay, 21-38 m); Sts. 440, 444 and 445 (off Gotô Islands, 152 m, 194 m and 73 m); St. 461 (off Tsushima, 120 m); St. 470 (off Hakata Bay, Fukuoka Pref., 73 m); St. 471 (off Yamaguchi Pref., 90 m); St. 494 (off Shimane Pref., 110 m) and Sts. 519 and 521 (off Tottori Pref., 81 m and 86 m).

Distribution: Formosa; Kyushu; Shikoku and Honshu (north to Bôso Peninsula).

242. *Lutraria sieboldi* REEVE

1854 *Lutraria sieboldii* (sic) REEVE, Conch. Icon. sp. 15.

1920 *Lutraria radiata* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 39 (6), 110, pl. 7, fig. 11.

Localities: St. 298 (off Toi zaki, Miyazaki Pref., 117 m); St. 440 (off Gotô Islands, 152 m) and Sts. 520 and 521 (off Shimane Pref., 75 m and 86 m).

Distribution: Kyushu; Shikoku and Honshu.

Superfamily Hiatellacea

Family Hiatellidae

243. *Hiatella orientalis* (YOKOYAMA)

1920 *Saxicava orientalis* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 39 (6), p. 106, pl. 7, figs. 2, 3.

1924 *Petricola awana* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 45 (1), p. 42, pl. 2, figs. 12, 13; pl. 3, fig. 1.

Localities: Sts. 11, 12, and 13 (off Chôshi, Chiba Pref., 375 m, 325 m and 210 m); St. 78 (off Shiriyazaki, Aomori Pref., 143 m); Sts. 205 and 207 (Kumano-nada, 224 m and 229 m); Sts. 210 and 211 (off Wakayama Pref., 165 m and 190 m); St. 200 (Tosa Bay, 234 m); St. 252 (Sagami Bay, 289 m); Sts. 276 and 279 (Suruga Bay, 77 m and 156 m); Sts. 301 and 304 (off Toi-zaki, Miyazaki Pref., 181 m and 241 m); Sts. 321 and 322 (Bungo Channel, 457 m and 110 m); St. 325 (off Uwajima, Ehime Pref., 210 m); St. 331 (off Ashizuri-zaki, Kochi, Pref., 344 m); Sts. 417 and 419 (off Makurazaki, Kagoshima Pref., 192 m and 402 m); St. 428 (off Amakusa, 119 m); Sts. 433, 440, 447, 452 and 475 (off Gotô Islands, 168 m, 152 m, 90 m, 154 m and 192 m); Sts. 462 and 468 (off Tsushima, 117 m and 112 m); Sts. 471, 481 and 483 (off Yamaguchi Pref., 90 m, 143 m and 130 m); St. 498 (off Shimane Pref., 139 m); St. 504 (off Oki Islands, 106 m); St. 575 (off Noto Peninsula, 123 m); St. 591 (off Niigata Pref., 311 m); Sts. 600, 602 and 606 (off Sado Island, 168; 205 m and 117 m); St. 627 (off Akita Pref., 148 m) and St. 637 (off Oga Peninsula, 145 m).

Distribution: Kyushu; Shikoku; Honshu; Hokkaido and Korea.

Superfamily Myacea

Family Corbulidae

244. *Varicorbula bifrons* (A. ADAMS)

(Pl. II, fig. 14)

1860 *Corbula bifrons* A. ADAMS, Ann. Mag. Nat. Hist., (3) 5, p. 412.

1922 *Corbula substriata* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 44, p. 125, pl. 7, fig. 3.

Localities: St. 4 (off Bôso Peninsula, 287 m); St. 11 (off Chôshi, Chiba Pref., 375 m) St. 221 (Tosa Bay, 209 m); St. 240 (Sagami Bay, 192 m); Sts. 274, 276 and

279 (Suruga Bay, 51 m, 77 m and 155 m); St. 300 (off Toi-zaki, 110 m); Sts. 319 and 322 (Bungo Channel 210 m and 110 m); St. 327 (off Uwajima, Ehime Pref., 216 m); St. 345 (off Muroto-zaki, 165–199 m); St. 363 (off Owase, Mie Pref., 439 m); St. 365 (off Hamashima, Mie Pref., 93 m); Sts. 376 and 377 (off Omae-zaki, Shizuoka Pref., 64 m and 82 m); St. 384 (the entrance of Ise Bay, 21–38 m); St. 395 (off Tanabe, Wakayama Pref., 46 m); St. 428 (off Amakusa, 119 m); Sts. 444, 447, 448, 452 (off Gotô Islands, 194 m, 90 m, 157 m and 154 m); Sts. 459, 462, 468 and 469 (off Tsushima, 115 m, 117 m, 112 m, and 91 m); St. 470 (off Hakata Bay, Fukuoka Pref., 73 m); St. 479 (off Urusan, Korea, 148 m); Sts. 484 and 488 (off Yamaguchi Pref., 93 m and 406 m); Sts. 491, 494 and 520 (off Shimane Pref., 112 m, 110 m and 75 m); St. 503 (off Oki Islands, 146 m) and St. 554 (off Ishikawa Pref., 95 m).

Distribution: Kyushu; Shikoku and Honshu (north to Bôso Peninsula and Noto Peninsula).

245. *Varicorbula yokoyamai* HABE

1922 *Corbula pygmaea* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 44, p. 125, pl. 7, figs. 4, 5, (non HANLEY 1856).

1949 *Varicorbula yokoyamai* HABE, Illust. Cat. Jap. Shells, 1 (1), p. 2, pl. 1, fig. 5.

Localities: St. 78 (off Shiriyazaki, Aomori Pref., 102 m) and St. 491 (off Shimane Pref., 112 m).

Distribution: Kyushu (Ariake Bay); Honshu (Tokyo Bay and two stations cited above).

246. *Anisocorbula scaphoides* (HINDS)

1843 *Corbula scaphoides* HINDS, Proc. Zool. Soc. London, p. 56.

Locality: St. 300 (off Toi-zaki, Miyazaki Pref., 110 m).

Distribution: Ceylon; East Indies; Philippines, China; Formosa; Kyushu; Shikoku and Honshu (north to Wakayama Pref.).

247. *Anisocorbula modesta* (REEVE)

1843 *Corbula modesta* REEVE, Conch., Icon., sp. 14.

Localities: St. 327 (off Uwajima, Ehime Pref., 216 m) and St. 445 (off Gotô Islands, 75 m).

Distribution: East Indies; Philippines; Kyushu; Shikoku and Honshu (north to Wakayama Pref.).

248. *Anisocorbula venusta* (GOULD)

1861 *Corbula venusta* GOULD, Proc. Boston Soc. Nat. Hist., 8, p. 25.

Localities: St. 11 (off Chôshi, Chiba Pref., 375 m); St. 78 (off Shiriya-zaki, Aomori

Pref., 143 m) Sts. 240, 249 and 255 (Sagami Bay, 192 m, 229 m and 263 m); St. 259 (Suruga Bay, 188 m); St. 304 (off Toi-zaki, Miyazaki Pref., 241 m); St. 327 (off Uwajima, Ehime Pref., 216 m); St. 345 (off Muroto-zaki, 165-199 m); St. 362 (off Owase, Mie Pref., 64 m); St. 376 (off Omae-zaki Shizuoka Pref., 64 m); St. 384 (the entrance of Ise Bay, 21-38 m); Sts. 432, 433, 439, 440, 445, 447 and 452 (off Gotô Islands, 148 m, 168 m, 152 m, 73 m, 90 m and 154 m); Sts. 459, 462, 564, 468 and 469 (off Tsushima, 115 m, 117 m, 110 m, 112 m and 91 m); St. 470 (off Hakata Bay, Fukuoka Pref., 73 m); St. 477, (off Pusan, Korea, 99 m); Sts. 481, 483 and 486 (off Yamaguchi Pref., 143 m, 130 m and 139 m); St. 494 (off Shimane Pref., 110 m); St. 506 (off Oki Islands, 106 m); St. 577 (off Noto Peninsula, 311 m) and St. 646 (off Tsugaru Peninsula, 123 m).

Distribution: Kyushu; Shikoku; Honshu; southern Hokkaido and Korea.

249. *Anisocorbula minutissima* HABE

(Pl. II, fig. 15)

1949 *Anisocorbula minutissima* HABE, *Illust. Cat. Jap. Shells*, 1 (1), p. 4, pl. 1, fig. 6.

Localities: Sts. 447 and 459 (off Gotô Islands, 90 m and 115 m); St. 468 (off Tsushima, 112 m) and Sts. 484 and 486 (off Yamaguchi Pref., 93 m and 139 m).

Distribution: Kyushu; Shikoku and Honshu.

250. *Potamocorbula amurensis* (SCHRENCK)

1862 *Corbula amurensis* SCHRENCK, *Bull. Acad. Imp. Sci. St. Petersburg* 4, p. 412.

1862 *Corbula amplexa* A. ADAMS, *Ann. Mag. Nat. Hist.*, 9, p. 233.

1922 *Corbura frequens* YOKOYAMA, *Jour. Coll. Sci. Imp. Univ. Tokyo*, 44, p. 123, pl. 6, fig. 16, 17.

1922 *Corbula pustulata* YOKOYAMA, *l. c.*, p. 123, pl. 6, fig. 18.

1922 *Corbula sematensis* YOKOYAMA, *l. c.*, p. 124, pl. 6, fig. 19.

Localities: Sts. 363 (off Owase, Mie Pref., 439 m) and Sts. 359 and 462 (off Tsushima, 115 m and 117 m).

Distribution: Siberia; Korea; North China; Hokkaido; Honshu and Tsushima.

Remarks: Specimens from this survey are immature, but they are quite agree well with the young specimens of this species from Takahoko-numa in Aomori Pref., Honshu.

Superfamily Pholadacea

Family Pholadidae

251. *Barnea (Umitakea) japonica* (YOKOYAMA)

(Pl. I, fig. 26)

1920 *Pholadomya japonica* YOKOYAMA, *Jour. Coll. Sci. Imp. Univ. Tokyo*, 39 (6), p. 106, pl. 6, figs. 30, 31.

Locality: St. 483 (off Shimane Pref., 130 m).

Distribution: Kyushu; Shikoku and Honshu.

252. *Nettastomella japonica* (YOKOYAMA)

(Pl. II, fig. 11)

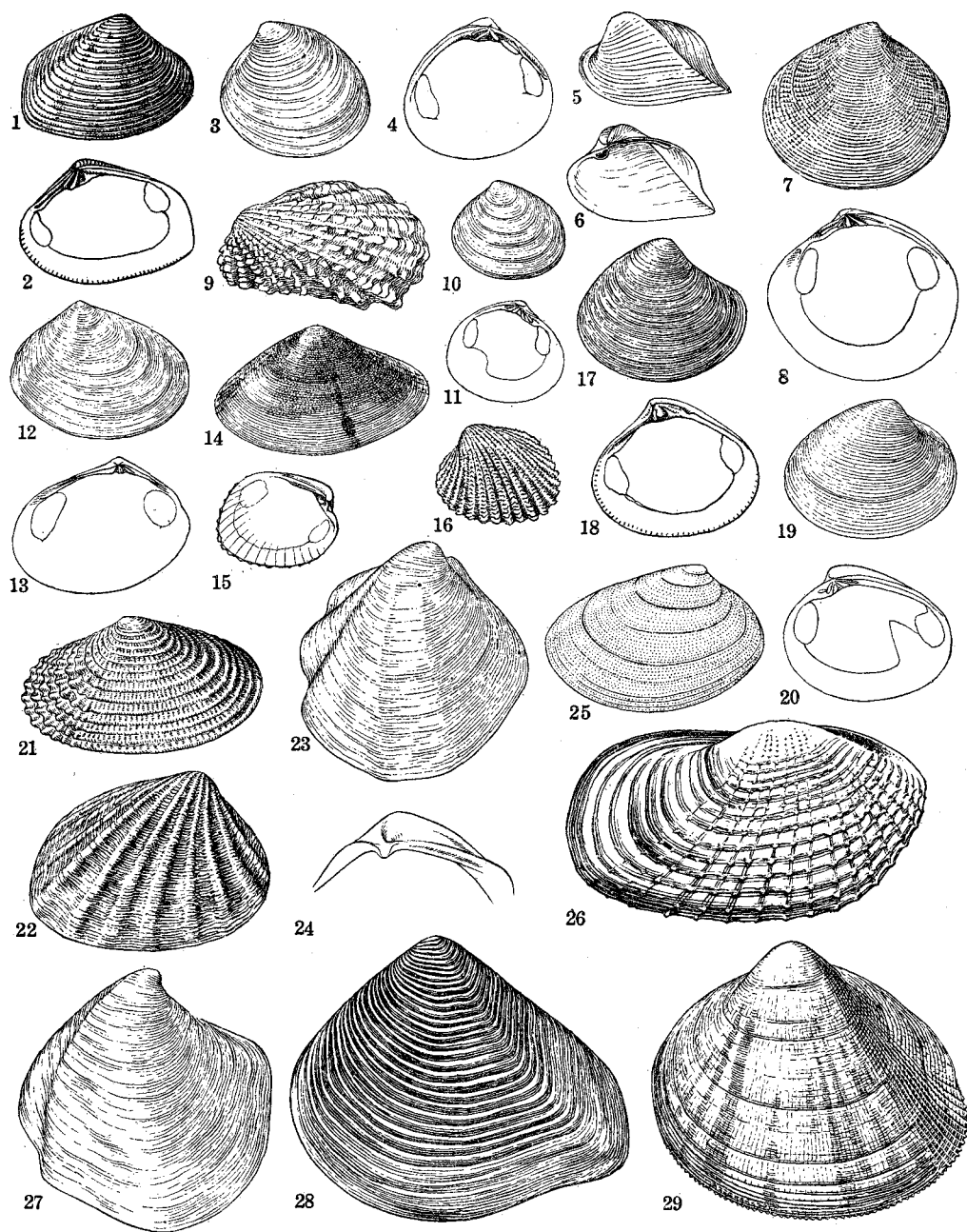
1920 *Jouannetia japonica* YOKOYAMA, Jour. Coll. Sci. Imp. Univ. Tokyo, 39 (6), p. 105, pl. 7, fig. 1.

Localities: St. 564 (Yamato-tai, off Noto Peninsula, 305 m) and Sts. 605 and 606 (off Sado Island, 139 m and 117 m).

Distribution: Honshu and Hokkaido.

EXPLANATION OF PLATE I

- Figs. 1, 2. *Crassatina oblongata* (YOKOYAMA), 10.7×8.9 mm.
 Figs. 3, 4. *Microcirce gordonis* (YOKOYAMA), 3.5×3.5 mm.
 Figs. 5, 6. *Meiocardia tetragona* (A. ADAMS et REEVE), 29.1×18.6 mm.
 Figs. 7, 8. *Circe (Redicirce) nana* MELVILL, 12.6×11.5 mm.
 Fig. 9. *Cardita nodulosa* LAMARCK, 18.7×11.7 mm.
 Figs. 10, 11. *Laevicirce soyoae* HABE, 6.7×6.2 mm.
 Figs. 12, 13. *Abra soyoae* HABE (sp. nov.), 12.2×9.2 mm.
 Fig. 14. *Spodervillia biscalpta* (GOULD), 5.2×3.5 mm.
 Figs. 15, 16. *Glans hirasei* (DALL), 21.1×17.4 mm.
 Figs. 17, 18. *Astarte hakodatensis* YOKOYAMA, 9.7×9.3 mm.
 Figs. 19, 20. *Pitar (Costellipitar) chordatum* (ROEMER), 10.0×9.0 mm.
 Fig. 21. *Elliptotellina fabrefacta* (PILSBRY), 7.3×4.4 mm.
 Fig. 22. *Venericardia (Megacardita) ferruginosa* (A. ADAMS et REEVE), 20.3×17.2 mm.
 Figs. 23, 24. *Thyasira (Philis) kanamarui* HABE, 9.0×8.0 mm.
 Fig. 25. *Cadella lubrica* (GOULD), 14.6×9.5 mm.
 Fig. 26. *Barnea (Umitakea) japonica* (YOKOYAMA), 66.6×39.6 mm.
 Fig. 27. *Thyasira (Parathyasira) kawamurai* HABE, 12.5×12.1 mm.
 Fig. 28. *Crassatellites nanus* (A. ADAMS et REEVE) 41.7×36.5 mm.
 Fig. 29. *Keenaea samarangae* (MAKIYAMA), 28.7×26.4 mm.



T. HABE: MOLLUSCA CHIEFLY COLLECTED BY THE SÔYÔ-MARU, 4.

EXPLANATION OF PLATE II

- Fig. 1. *Frigidocardium eos* (KURODA), 20.7×19.6 mm.
Fig. 2. *Divalucina soyoae* (HABE), 28.5×27.0 mm.
Fig. 3. *Bellucina civica* (YOKOYAMA), 7.7×7.8 mm.
Fig. 4. *Axinopsida subquadrata* (A. ADAMS), 3.8×3.7 mm.
Fig. 5. *Conchocele disjuncta* GABB, 25.9×23.0 mm.
Fig. 6. *Lajonkairia divaricata* (LISCHKE), 15.8×14.4 mm.
Fig. 7. *Placamen tiara* (DILLWYN), 15.2×13.0 mm.
Fig. 8. *Venus (Ventricolaria) toreuma* GOULD, 25.7×23.4 mm.
Fig. 9. *Liocyma aniwana* DALL, 34.8×21.7 mm.
Fig. 10. *Notomyrtea soyoae* HABE, 6.6×5.9 mm.
Fig. 11. *Nettastomella japonica* (YOKOYAMA), 13.9×10.0 mm.
Fig. 12. *Callanaitis hiraseana* KURODA, 17.0×12.7 mm.
Fig. 13. *Oxyperas bernardi* (PILSBRY), 62.3×34.6 mm.
Fig. 14. *Varicorbula bifrons* (A. ADAMS), 4.8×4.2 mm.
Fig. 15. *Anisocorbula minutissima* HABE, 5.2×3.8 mm.
Figs. 16, 17. *Alucinoma soyoae* HABE, 10.7×10.4 mm.
Fig. 18. *Trifaricardium nomurai* KURODA et HABE, 15.5×15.5 mm.
Fig. 19. *Astarte (Tridonta) multcostata* FILATOVA, 25.1×20.3 mm.
Fig. 20. *Venus (Ventricoloides) foveolata* SOWERBY, 48.5×42.1 mm.

